We only wear 20% of the clothes we own. Let’s change that.

1/3rd of the food we produce is wasted. Let’s change that.

We are both dealing with streamlining industrial waste. Combine forces!

What if we created a marketplace for used clothing?

What if we designed a Food Truck that picks up and recooks local food waste?

The clothing industry problem better aligns with the skills we want to gain through this project.

Let’s match clothing dimensions to human dimensions in order to resell unused clothing to those who fit them perfectly.
Clothing tag inconsistencies lead to wasted time in stores and 40% return rates online. Let's change that.

If clothing tags were more descriptive, nothing would need to be measured. A broken clothing measurement system is the root of the problem.

What if we store this data in a clothing printed QR code, a image recognition compatible printed logo, or a washable NFC tag?

True dimensions of a piece of clothing are contained in manufacturing spec sheets.

Anything printed will not work due to user and washer wear. Also buying jeans is highly related to a good fit, let's use that as a test case for the system.

An app like this would only work if there are jeans in the database.

Embed washable NFC tag into the rivet of a jeans button. Design a mobile application that takes spec sheet data to find other similarly fitting jeans.

Pilot the system with Urban Outfitters.
“40 percent of apparel bought online is returned, and 60 percent of returns are size problems” – Newsweek (1)

“No other industry works so hard, to make it so hard to buy their stuff.” – John Malmo, PBS (2)

“For the consumer to go out and navigate which one do I match with is a huge challenge, and causes frustration and returns,” said Tanya Shaw, New York Times

“When we try on 10 pairs of jeans to buy one, the reason you feel bad is because you think something’s wrong with you.” - Mary Alderete, Levi’s VP

“It would be nice just to take the pant, look at the label and say, ‘That should fit me...Change is needed.” - Marie-Eve Faust (3)
Sizing tags are not reliable

Could there be a way for a consumer to see a pair of jeans and know if it fits like their other pair?

The size of a given pair of jeans differs from brand to brand. And, many times the size of the jean will differ from pair to pair within a brand. We found that many women have an array of sizes for a one style of jean. It became apparent that many women had a story to tell about how difficult finding a good fitting pair of jeans actually is.
Survey of women’s responses to sizing and fitting experiences.

“The sizing, fit and quality of jean is drastically different depending on the pair you grab…”

“Consistency is rare.”

“X seems to completely reinvent their denim system every year or so.”

“I was crushed when they were discontinued. Now I have to start all over finding something I like.”

“I bought my X in 2012 and I always have had hopes that when I go to Y, I will find that pair again…”
Jeans are created off of a Specification Sheet

This is important because it contains all of the dimensions and material make-up that make up your jeans. It is what makes your favorite jeans... your favorite.

Spec Sheet

determines the cut

within a tolerance (+/-)

not on the waist tag

Jean Size
We should be able to make smarter decisions when buying jeans. This is why we want to embed the full spec sheet information into a pair of jeans using smart technology. A person can then easily upload this pair to the cloud to find similar pairs, making the search for a great fitting pair of jeans much easier.
A Company’s Jean Offerings

The specification sheet of each pair of jeans a company offers is put up onto the cloud to be used when trying to find matches.
Jeans Matching

The dimensional data of your favorite jeans is uploaded to the cloud. That data will then be used in a matching process. Other jeans with similar dimensions will then be shown in a hierarchy, from best match to worst.
How jeans are compared: 1st Step
Material Comparison

**Best Fitting Pair**
- Women’s Jean Legging Style
- Material Composition:
  - 68% Cotton
  - 27% Polyester
  - 5% Spandex

**Search Results Match**
- Perfectly Slimming Jean
- Material Composition:
  - 85% Cotton
  - 14% Polyester
  - 1% Elastane

-Looks at Material similarities
-This involves the percent of each ingredient that is used in the denim
-Creates an overall percent match based on this comparison for the user to see.

Matches made in the cloud
**How jeans are compared: 2nd Step**

**Measurement Comparison**

- Looks at measurement similarities

- This involves looking at each specific measurement location on the jeans you love and matching these to a pair that has similar measurements at specific locations

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<thead>
<tr>
<th>Spec Sheet</th>
<th>Measurements</th>
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<tbody>
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<td>Jean Size</td>
<td>25 26 27 28 29 30 31</td>
</tr>
<tr>
<td>US Size</td>
<td></td>
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<tr>
<td>Upper Waist</td>
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Matches made in the cloud

- Creates an overall percent match based on this comparison for the user to see
3 Concepts
Efficient ways to upload your favorite jeans

- QR Code Tag
- Image Recognition
- NFC Smart Button
NFC Technology

Why?

QR codes and images will both be vulnerable to damage from wear and tear, as well as washing.

Public sentiment towards the technology is predominantly negative.

Image recognition is very similar to QR and can be susceptible to damage. It also is viewed as something that may not always work.

NFC tags are quite durable and are waterproof. They also have a good reputation for reliably integrating with smartphones.

The NFC jean button allows for a seamless integration into the jean assembly as well as a way to ensure that the way the data is transmitted is protected.
NFC tag is built into the jeans button

This is a place on the jean that is interacted with everyday multiple times and lends itself nicely to creating a story behind it.

A user can find this area easily and hold their smart phone up to it to upload the jeans with ease.
NFC chip
No numbers to check. No barcode to scan. Just hover over the button with your smartphone. A web link stored within the NFC will instantly access detailed data about your jeans from the cloud.

Smart Rivet
A durable and washable storage of information. A seamless fit into your pair of jeans. A mass manufacturable design to disrupt a massive industry.

Jeans Button
Fitworks manufactures rivets for all button types. A brand simply has to swap their rivet supply, not one change in manufacturing required. Changing the game, without changing the brand.
Add the brands you love to your Fitworks Outlet. If your favorite brand isn’t part of our family yet, encourage them by posting #HonestFit

Save the fit of your jeans onto the Fitworks system simply by hovering over the button with your smartphone.

Add your comfortable home fit, your going downtown fit, and any others. Use those fits to buy other jeans that are just like it.

Find a pair of jeans that look and fit just like your favorites, all in a few seconds. Welcome to a new shopping experience.
A Blinded Experience

It’s difficult to know your size when online shopping.

“40 percent of apparel bought online is returned, and 60 percent of returns are size problems” – Newsweek

Disrupting the Norm

fitworks.

Fitworks plans to license its services to companies who sell different brands of jeans under one main company.

By partnering with companies like Urban Outfitters, fitworks is able to upload data from each jean spec sheet to the cloud.

Each new pair bought, will have a smart button to allow users to easily upload their pair by hovering over the button with the app open. They can then find fits similar to that pair.

Jean wearers can shop with more confidence and less hassle. Shopping just got a whole lot easier.
The business structure of Fitworks is something that needs more development but should rely on building partnerships with key companies - selling them on enhanced customer experience and increased customer loyalty.

Users can find jeans that fit THEM easier. Updates on new jeans that they might be interested in can be tailored to their desires. Novel experience increases customer experience and confidence, increasing "return" shoppers.

Data on a shoppers preferences, popular dimensions, and user trends can be compiled and given back to each company for analyzation.

Fitworks is integrated into the app/online shopping experience. A user accesses it through their login page for the company.
Shopping just got a lot easier.